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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,157	02/01/2002	Michael Franklin Glass	02004.056	8262

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[REDACTED] EXAMINER

ROSENBERG, LAURA B

[REDACTED] ART UNIT [REDACTED] PAPER NUMBER

3616

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/049,157	GLASS, MICHAEL FRANKLIN
	Examiner Laura B Rosenberg	Art Unit 3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 - 2a) This action is FINAL. 2b) This action is non-final.
 - 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
- Disposition of Claims**
- 4) Claim(s) 1-9 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 - 5) Claim(s) _____ is/are allowed.
 - 6) Claim(s) 1-5 and 9 is/are rejected.
 - 7) Claim(s) 6-8 is/are objected to.
 - 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the embodiment of claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

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4. The abstract of the disclosure is objected to because legal phraseology is used in lines 3 and 4 and there is a grammatical error in the phrase "vehicle wheel st comprising" in line 1. Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: the different sections of the specification (summary of the invention, brief description of the drawings, etc.) are not clearly pointed out. Labeling each section with a title makes it easier to navigate through the specification. Appropriate correction is required.

Claim Objections

6. Claims 6-8 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, claim 5 describes an embodiment of the auxiliary spring means that is not supported by the drawings or the specification.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "its rate" in line 7. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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13. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedenberg et al. (5,351,986). In regards to claims 1 and 3, Hedenberg et al. disclose a suspension system for a vehicle wheel set (#14; column 5, lines 34-40) comprising an upper leaf spring (#40) and a lower leaf spring (#38), each being mounted on opposed sides of an associated vehicle generally transversely of the associated vehicle axle (#15). One end (near #44) of each upper and lower leaf spring comprises connection means (#25, 27, 44) for attachment to an associated vehicle chassis (#19) and auxiliary spring means (#33) are mounted in series with the upper leaf spring (column 4, lines 8-11) and arranged to alter the spring rate in proportion to the imposed load at constant ride height (column 4, lines 30-42). Though not specifically pointed out, the springs are arranged such that they can provide the associated vehicle with ride characteristics and dynamic deflection geometry substantially the same as those of a conventional solo leaf spring system.

In regards to claim 2, Hedenberg et al. disclose the auxiliary spring means being mounted at an end (near #46) distant from the associated connection means (near #44) of the upper leaf spring (best seen in figures 2, 3).

In regards to claim 4, Hedenberg et al. disclose the auxiliary spring means comprising an air spring (#33; column 2, line 51).

14. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Orndorff, Jr. et al. (5,007,660). In regards to claims 1 and 3, Orndorff, Jr. et al. disclose a suspension system for a vehicle wheel set (#5) comprising an upper leaf spring (upper

leaf of #8) and a lower leaf spring lower leaf of #8), each being mounted on opposed sides of an associated vehicle generally transversely of the associated vehicle axle (#6). One end (near #10) of each upper and lower leaf spring comprises connection means (#10) for attachment to an associated vehicle chassis (#4) and auxiliary spring means (#28, 60) are mounted in series with the upper leaf spring (column 1, lines 30-37; column 3, lines 41-46) and arranged to alter the spring rate in proportion to the imposed load at constant ride height (column 1, lines 30-46). Though not specifically pointed out, the springs are arranged such that they can provide the associated vehicle with ride characteristics and dynamic deflection geometry substantially the same as those of a conventional solo leaf spring system.

In regards to claim 2, Orndorff, Jr. et al. disclose the auxiliary spring means being mounted at an end (near #28) distant from the associated connection means (near #10) of the upper leaf spring (best seen in figure 1).

In regards to claim 5, Orndorff, Jr. et al. disclose the auxiliary sprig means comprising manual mechanical spring means (#28, 60; best seen in figures 2, 6).

Conclusion

15. The prior art made of record and not relied upon discloses leaf spring suspension systems and is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B Rosenberg whose telephone number is (703)

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305-3135. The examiner can normally be reached on Monday-Thursday, alternating Fridays 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached at (703) 308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Laura B. Roy
May 19, 2003


PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600